

DEPARTMENT OF THE ARMY

AFGHANISTAN ENGINEER DISTRICT  
US ARMY CORPS OF ENGINEERS  
KABUL, AFGHINISTAN  
APO, AE 09356



13 November 2005

REPLY TO  
ATTENTION OF:  
CEAED-CT

Subject: Amendment 0002 to Request for Proposal (RFP), for: D/B Warehouses (National Military Academy of Afghanistan), D/B Bathrooms (Darulaman) and D/B Parking (Camp Julian), Kabul, Afghanistan

Gentlemen:

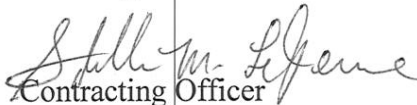
Replace Section 01010 Scope of Work with the revised Section 01010 Scope of Work dated 13 November 2007. Replace Section 01335 Submittal Procedures for Design-Build Projects with the revised Section 01335 Submittal Procedures for Design-Build Projects dated 13 November 2007.

**Your proposal must be submitted and received no later than 5 PM, on 16 November 2007, to the attention of Stella Lejeune. Proposals shall be submitted by hand or by courier at the USACE compound in Kabul. No e-mail submissions will be accepted.** Negative replies are requested.

Technical questions shall be addressed in writing to: Stella Lejeune, via email to **Stella.M.Lejeune2@usace.army.mil**.

Please date, sign and return this letter as acknowledgement of receipt. Acknowledgment and questions in regards this request **shall be addressed to: Stella Lejeune via e-mail to Stella.M.Lejeune2@usace.army.mil**.

Sincerely,

  
Contracting Officer

RECEIPT ACKNOWLEDGED

\_\_\_\_\_  
(Signature & Date)

\_\_\_\_\_  
(Print Name & Title)

## **SECTION 01010**

### **SCOPE OF WORK**

**Revised on 13 November 2007**

#### **1. GENERAL**

The project consists of the design and construction of K-Span buildings for Warehouses at National Military Academy of Afghanistan (NMAA), Temporary Bath Facilities at Darulaman Garrison and a Vehicle Parking Lot at Camp Julian within the vicinity of Kabul, Afghanistan. Refer to Appendix-A and B for approximate site locations. The project is defined as the design, material, labor, and equipment to construct buildings, parking, utilities and other infrastructures. The work in this contract shall meet and be constructed in accordance current U.S. design and International Building Codes (IBC), Life Safety Codes (NFPA-101), Force Protection and security standards. A partial listing of references is included herein:

IBC, International Building Codes 2003

NFPA 101, Life Safety Codes

UFC 4-010-01, DoD Minimum Anti-Terrorism Standards for Buildings.

#### **1.1. ENGLISH LANGUAGE REQUIREMENT**

All information shall be presented in English. The Contractor shall have a minimum of one English-speaking representative to communicate the COR at all times when work is in progress.

#### **1.2. SUBMITTALS**

Submittals and a Submittal Register are required as specified in Section 01335 of the Basic Contract.

#### **1.3. COST ESTIMATE**

The contractor shall prepare a parametric construction cost estimate for AED Engineering data collection purposes. The contractor shall prepare a thorough, well-supported, estimate reflecting the final design features, construction schedule and conditions, and any construction phasing requirements. The cost estimate shall be submitted as part of the 35%, 99% and Final design submittals are required for this contract.

#### **1.4. CQM TRAINING REQUIREMENT**

Before project design and construction begin, the Contractor's Quality Control Manager is required to have completed the U.S. Army Corps of Engineers CQM course, or equivalent. The Construction Trades Training Center (CTTC) in Jalalabad, Afghanistan provides a course that satisfies the requirement. Courses are offered at regular intervals. For enrollment and course information contact CTTC at the following:

Mhd. Haris

e-mail: [mharis@afghanreconstruction.org](mailto:mharis@afghanreconstruction.org)

Telephone: 0700 08 0602

Pervaiz

e-mail: [adpzmuj@yahoo.com](mailto:adpzmuj@yahoo.com)

Telephone: 0700 61 3133

#### **2. LOCATION**

The proposed buildings and facility are located in 3 different sites at NMAA, Darulaman Garrison and Camp Julian in Kabul, Afghanistan.

### **3. UNEXPLODED ORDNANCE (UXO)**

#### **3.1. UXO REMOVAL AND CLEARANCE**

The contractor is not responsible for the clearance or removal of mines and unexploded ordnance (UXO) from the site prior to the commencement of construction.

It is the responsibility of the Contractor to be aware of the risk of encountering UXO/mines and to take all actions necessary to assure a safe work area to perform the requirements of this contract. The Contractor assumes the risk of any and all personal injury, property damage or other liability arising out of or resulting from any Contractor action taken hereunder. The Contractor and its subcontractors may not handle, work, move, transport, render safe, or disarm any UXO/mine, unless they have appropriate accreditations from the MAC.

If a UXO/mine is encountered during project construction, UXO/mine disposal shall be handled in accordance Section 01015, Technical Requirements.

### **4. SUMMARY OF WORK**

#### **4.1. CONTRACTOR REQUIREMENTS**

The contractor shall design and construct the facilities as a design-construct contract and shall be in accordance the requirements stated in Section 01015: TECHNICAL REQUIREMENTS. Refer to attachment following this section for more specifics for required spaces. The design and construction work shall include but not be limited to that shown in attached table and described herein.

##### **4.1.1. GENERAL REQUIREMENTS FOR FACILITIES**

All requirements set forth in the Scope of Work, but not included in the Technical Requirements, shall be considered as set forth in both, and vice versa. Provide heating and cooling for all facilities unless otherwise stated in Section 01010 or 01015.

All standard construction amenities and details such as heating, lighting, site drainage, utility connections, etc. shall be implied as a design and construction requirement. Drawings referenced are contained in Section 01015.

In general, this project consists of designing and constructing of the following:

##### **4.1.2. BASE BID**

The project consists of the design and construction of the following items:

##### **Item-1: K-Span Warehouses-1 and 2 at NMAA**

Attached Image and Drawings: Appendix-A1 through A10

Building Type: Warehouses for storage of supplies of US Government and NMAA.

Construction Type: Permanent with Life Expectancy of Minimum 20 Years, Fire-Resistant.

Configuration: 1-Story, Long-Span. Height of the K-Span shall be designed for most Economical Construction and Energy Conservation. Both Warehouses will be Air-conditioned as required under HVAC. Therefore, the Rise of K-Span Roof shall be kept to optimum height. See Appendix-A10.

Dimensions/Size: 70.0M Long x 20.0M Wide (Nominal) for each Building.

Basic Structural Materials: Floor: Concrete Floor Slab-On-Grade to support Truck (7.0 Metric Tons) Entering one side and Exit at other end. Stem Wall: 3.0M High, Concrete or CMU with concealed or protected Insulation. Roof: K-Span (Pre-Engineered).

Site Works: Earthwork for Warehouse-1 has been partially Filled and Compacted. Earthwork for Warehouse-2 requires full execution.

Road Work: The Contractor shall construct asphalt paved entrance and exit driveways to both warehouses and an asphalt paved access road, as shown in Appendix A4. The driveways and access road shall be a minimum 7.3M wide. The length of the driveways shall extend from the nearest road to the warehouse doors. A minimum turning radius of 19M shall be used for the driveways and access road.

Exterior Stairs and Steps: Reinforced Concrete, if required.

Basic Roofing Materials: Pre-engineered K-Span Metal Roof Curve with Ribs. Metal Roof shall be Pre-finished.

Energy Conservation: Provide Insulation with R-Value as specified under Section 01015 - Technical Requirements (Mechanical & HVAC) to building's enclosure (Roof, Walls and Door). Wall Insulation shall be Rigid type and protected by Plywood ¾" Thick up to 2.4M High. Secure Plywood sheet to Concrete or CMU wall and paint with same color as specified for Interior and Exterior.

Roofing Drainage: Provide Gutter and downspout and direct to nearest Storm Drainage Main.

Exterior Wall: Reinforced Concrete, CMU or 3D-Panel.

Doors: Door shall be Steel Leaves and Frames. Provide Sliding Steel Doors at both ends. Doors shall be Bi-parting with clear opening of 4.00M x approx 4.50M High to allow for Truck entering K-Span building and for moving large equipment in-out. Provide Swing Door for Egress at each End of Building per Safety Codes.

Door Hardware: Provide complete sets of Hardware to all Doors. Heavy-duty commercial Grade. Do not provide Louvers at Doors.

Exterior Window: Not Required.

Exterior Finishes: All visible Concrete and CMU surfaces shall have Stucco finish Paint. 3D-Panel shall be painted. Color shall be "Desert Sand". Roof Cladding shall be Pre-finished (Powder-Coat). Metal Doors and Louver shall be painted.

Interior works: Include Chain-link Storage Bays, 3.0M High as shown on Appendix. Provide Chain-link Doors with size to allow for Dolly or Crane with Standard Shipping Pallet to pass through. Provide complete Hardware. Provide Service Window, 1 per each Bay (Sliding, Size 0.60M Wide x 1.0M High). Provide Stainless Steel Shelf 0.60 M Wide x 0.35M Deep).

Interior Finishes - Floor: Machine-Trowel Finish for entire warehouse areas and Extended Slab front and rear of Sliding Doors, as shown.

Interior Finishes Walls: All visible Concrete and CMU surfaces shall have Stucco and Paint finish. 3D-Panel shall be painted. Interior Chain-link Partition and Doors shall be Manufacturer Primed.

Interior Doors and Louvers: Shall be painted.

Finish-Ceiling: Prefinished Structure or Paint over Sprayed-on Insulation.

HVAC: Naturally Ventilated. Provide Fixed Louver Shut-off Damper at both Roof Gable Ends. Provide Ceiling Fans at Height of 3.60M Above Finish Floor. Fan shall be provided in 2 Rows at 10.00M On Center. Both Warehouses shall be cooled and heated by Forced Air System with Ductwork to maintain Indoor Temperature range of 50 Degree in Winter and 90 Degree in Summer. Provide room for Mechanical Unit and Fuel Tanks as required. Provide Concrete Slab Base and Chain-link cage & Gate for Outdoor unit, as required under Technical Requirement of Mechanical, HVAC.

Electrical: Power Supply to K-Span Warehouses will be from Existing ~~Power Poles adjacent to Proposed Lots~~. Power plant onsite. Provide Duplex Receptacles (220V). Provide Communal Lighting per Electrical requirements for Warehouse Type.

Special Construction: Long-Span. No intermediate columns, No shear-walls or supports that obstruct open areas.

**Item-2: Temporary Bath Facility at Darulaman Garrison.**

Attached Drawing and Table: Appendix-B1 through B8.

Main Functions: Ablution, Toilet and Shower for ANA 1,000 Soldiers.

Construction Type: Fire-Resistant.

Configuration: 1-Story, Modular CONEX Units.

Dimensions/Size: Designer of D-B Contractor shall compile spaces from Table (Appendix-B7) plus maximum of 20% Circulation.

Basic CONEX Materials: Floor: Lightweight Concrete on Steel CONEX Floor. Wall: Metal, Insulated. Ceiling. Roof Assembly: Metal, Insulated.

Stairs and Steps: Reinforced Concrete if required for Elevated Floor.

Basic Roofing Materials: Roof shall be basic Unit's Top. Pitch Roof is not required for CONEX.

Energy conservation: Insulated Building Enclosure, all sides. Provide Insulation with R-Value as specified under Section 01015 - Technical Requirements (Mechanical & HVAC) to building's enclosure (Roof, Walls and Door). Provide Windows for Natural Ventilation and Light.

Doors: Door shall be Swing type with Steel Leaves and Frames. Provide complete sets of Hardware to all Doors (Heavy-duty type). Do not provide Louvers at Doors.

Interior Partitions: ~~Provide Stainless Steel Panels.~~ **Fiberglass or PVC Panels**

Interior Finishes - Floor: Nonslip Ceramic, Mosaic Tile or Terrazzo Tile.

Finish-Bases: ~~Stainless Steel.~~ **Fiberglass or PVC**

Interior Finishes Walls: ~~Stainless Steel Panels or~~ **Fiberglass or PVC Prefinished Panels.**

Finish-Ceiling: Pre-finished, Fiberglass Panels.

HVAC: Provide Exhaust Fans for Ventilation. Each Module will be heated with Electric Unit Heater. Heating Unit, Thermostat and Power Outlets must be concealed inside compartment lock.

Plumbing: According to the on-site O&M site managers at Darulaman Garrison, there is sufficient existing water supply and wastewater treatment capacity. Contractor shall obtain site utility drawings from on-site O&M managers and verify existing utilities that are located adjacent to the proposed site of this facility. The Contractor shall be responsible for connecting the bath facility to the existing water distribution and wastewater collection systems (see Appendix B4 and B5 for approximate utility hook-up locations).

Plumbing Fixtures: See Minimum Requirements at Appendix-B7.

Electrical: Power line shall run from Existing Transformer at Site. No Receptacles are required.

Special Construction: Provide Base, Anchors and Hold-down for CONEX as required.

Toilet Accessories: See Schedule at Appendix-B8.

Site Work: The Contractor shall surface the area, within the site and surrounding the bath facilities, with 150mm of compacted aggregate (see section 01015, paragraph 2.3.4.2).

**Item-3: Vehicle Parking at Camp Julian.**

Attached Drawing/Table: Appendix-B1

Construction Type: Aggregate Parking Space for 200 vehicles with Fence. Provide 2 sets of Gates (one on each end) approximately 7.3M Wide (2 -3.65m wide leafs) x 2.4m High.

Design Vehicle: Passenger Car/Light Truck

Dimensions: Provide standard 2.5M Wide x 6.0M Long Parking Space. 90 Degree Configuration. Driveway = 7.0M Minimum.

Basic Structure: Site improvement: The parking area is already graveled, need vegetation removed & gravel as needed. Leveled, compacted aggregate as required. Parking Area shall be minimum 150mm thick.

Fence: Shall be 2.4M High, Galvanized Steel Posts, Beams and Bracers with Chain-link. Provide Triple-Strand and Concertina Wires on top of post, with "Y" shaped outriggers (see Appendices B9 and B10 for fencing details).

Safety and Property Protection: Provide bollards constructed from steel and concrete filled at the corners of the entrance and exit gates.

#### **4.2. WATER SYSTEM**

There is an existing water supply and distribution system in place, at the Darulaman site, that includes a water well source, water well pump, water storage tanks and underground water distribution system. The Contractor shall connect the new bathroom facilities to the existing water distribution system. An approximate connection point is shown in Appendix B4. The Contractor shall coordinate with O & M on-site Managers (AED and its contractor – Contrack International Inc.), during construction of bathroom facilities and before connection to existing utilities.

#### **4.3. SANITARY SEWER SYSTEM**

There is an existing wastewater collection and treatment system in place, at the Darulaman site. The Contractor shall connect the new bathroom facilities to the existing wastewater collection system. An approximate connection point (manhole) is shown in Appendix B5. The wastewater building service connection line shall consist of gravity sewer pipe and appurtenances such as manholes, cleanouts and building service connections. The Contractor shall coordinate with O & M on-site Managers (AED and its contractor – Contrack International Inc.), during construction of bathroom facilities and before connection to existing utilities.

#### **4.4. DEMOLITION**

Minor site demolition is required prior to construction of new work mostly found in replacement work.

#### **4.5. SITE ELECTRICAL DISTRIBUTION SYSTEM**

The contractor shall design a power system for supply and distribution to all buildings and underground electrical distribution. Contractor shall connect to local power grid from an existing power poles or pad mounted transformer at the site accordingly. Contractor shall design and install all interior electrical systems and any required exterior lighting as described in section 01015, Technical Requirements. Conductors and circuits shall be size for the specific loads. All wiring shall be run and pull through conduits. All electrical design and installation shall meet NEC (NFPA 70).

#### **4.6. FORCE PROTECTION MEASURES**

Force protection design shall be in accordance Joint Security Directorate Antiterrorism/Force Protection Guide, March 2002.

#### **4.7. TRASH POINT**

The Contractor shall provide, in a location convenient for easy removal, a trash collection point. It shall be located inside the compound walls.

#### **4.8. HVAC, Heating Ventilation Air-Conditioning**

Environmental control of the facilities shall be achieved by HVAC equipment proposed by the contractor and approved by the U.S. Government. See section 01015 for scope of work required.

#### **4.9. LIFE SAFETY**

Design and Construct circulation pathways and exit stairs in accordance building code references herein. Fire sprinkler system is not required. The facility shall comply with all other safety requirements as required in references. Smoke detectors and fire alarm systems shall be installed in accordance requirements herein.

#### 4.10. LIGHTING

General lighting shall be provided as indicated and shall meet recommendations from IESNA for each building type and function in each building. Design and installation shall meet the requirements of the NEC.

Exterior lighting shall be high intensity discharge luminaires and consistent the predominant fixture type found throughout the compound.

#### 4.11. ELECTRICAL

The contractor shall design and construct a power system to supply necessary power to new and existing electrical loads. Additional power supply shall be obtained via the existing power distribution system. All electrical design and installation shall meet NEC requirements. Electrical receptacles shall be provided as indicated. Conductors and circuits shall be sized for the specific loads. Secondary voltage shall be 220/380V, 3-phase, 50Hz.

#### 4.12. FENCING AND BARRICADES

Fencing shall consist of the types to create a safe working project area to ensure occupants and workers are kept safe from the construction as much as possible.

#### 4.13. FOUNDATION DESIGN

Foundations, including subgrade, shall be designed and constructed based on recommendations from geotechnical investigation required herein.

### 5. COMPLETION OF WORK

Each Item shall be completed by calendar days, including government review time from Notice To Proceed (NTP) as shown in Table below:

#### 5.1. PERFORMANCE PERIOD

**For Item-1: K-Span Warehouse at NMAA, Item-2: Temporary Bath at Darulaman Garrison and Item-3: Parking at Camp Julian**

<b>Item-2: Temporary Bath (Ablution + Toilets + Shower at Darulaman Garrison</b>	<b>Completion Time From Notice to Proceed</b>
1- Site Survey/Master Planning	10 days
2- Site Grading	65 days
3- Water Distribution System	65 days
4- Sewer Distribution System	65 days
5- Electrical System	65 days
6- Toilet Building	65 days

<b>Item-3: Parking at Darulaman (at Camp Julian)</b>	<b>Completion Time</b>
1- Site Survey/Master Planning	10 days
2- Site Grading/Parking	65 days
3- Fencing	65 days

Item-1: K-Span Warehouses at NMAA		Completion Time
1- Site Survey		5 days
2- Site Grading		180 days
3- Electrical System		180 days
4- K-Spans		180 days

#### 5.2. LIQUIDATE DAMAGE:

Failure by the contractor to meet the deadline for 65 calendar days will require the US Government to incur costs for continuing project. For this phase Liquidated Damages per day \$496.08 will be charged.

Failure by the contractor to meeting deadlines for 180 calendar days for the whole project will require the US government to incur cost for continuing project and site management on the project beyond planned time-lines. If the whole project is not completed in 180 calendar days Liquidated Damages per day \$992.15 will be charged.

#### 6. REFERENCES

Refer to Section 01015 for Technical Requirements.

-- End of Section --

## SECTION 01335

### SUBMITTAL PROCEDURES FOR DESIGN-BUILD PROJECTS

Revised on 13 November 2007

#### PART 1 GENERAL

##### 1.1 REFERENCE

The publication listed below forms a part of this specification to the extent referenced. The publication is referenced to in the text by basic designation only.

#### CONSTRUCTION SPECIFICATIONS INSTITUTE

Manual of Practice  
Construction Specifications Institute  
[http://www.csinet.org/s\\_csi/index.asp](http://www.csinet.org/s_csi/index.asp)  
601 Madison Street  
Alexandria, Virginia  
22314-1791

#### NATIONAL INSTITUTE OF BUILDING SCIENCES (NIBS)

Unified Master Reference List (UMRL)  
National Institute of Building Sciences  
1090 Vermont Avenue, NW, Suite 700  
Washington, DC 20005-4905  
Email: [nibs@nibs.org](mailto:nibs@nibs.org)  
FAX: (202) 289-1092  
Tele: (202) 289-7800

#### AFGHANISTAN ENGINEER DISTRICT

AFGHANISTAN ENGINEER DISTRICT  
<http://www.aed.usace.army.mil>  
U.S. Army Corps of Engineers  
Attn.: Qalaa House  
APO AE 09356

#### TRANSATLANTIC PROGRAMS CENTER

##### Design Instructions Manual

U.S. Army Corps of Engineers  
<http://www.tac.usace.army.mil/extranet/>  
Transatlantic Programs Center  
201 Prince Frederick Drive  
Winchester, Virginia 22602

##### 1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

### 1.2.1 DESIGN SUBMITTALS

Contractor Furnished design submittals are the various design documents which primarily consist of specifications, drawings and design analysis and calculations. The Design-Build Contractor shall not begin construction work until the Government has reviewed the Design-Build Contractor's final design and has cleared it for construction. Clearance for construction shall not be construed as meaning Government approval. Unless otherwise indicated, the risk for the design is the sole responsibility of the Design-Build Contractor.

As a minimum, design submittals **for Warehouses at NMAA (K-Span Buildings)** shall be submitted at the following intervals:

Concept design (35%): In addition to submission requirements, a design analysis/basis of design shall be required, including a proposed listing of specification sections.

General design (65%): In addition to submission of designs, the contractor shall provide the design analysis, design specifications and design calculations.

Final (100%): In addition to submission requirements, a final draft of specifications and design analysis/basis of design shall be required.

The 65% and 100% submittals shall also contain the previous Dr Checks comments. Each of the Dr Checks comments shall be reviewed by the respective AE discipline to ensure that the comment has been adequately addressed. AE response of "will comply" is not sufficient. Responses shall describe how the comment was addressed, the applicable drawings sheet which the comment was incorporated and any additional comments and references to the adequacy for the rebuttal.

**The design process will not be required for the bathroom buildings at Darulaman Garrison & Parking at Camp Julian in this contract. The Contractor shall submit Construction Submittals for each item including site work, site drainage, utilities, and all other components of the project. The contractor shall submit shop drawings to show site drainage utilities and detailed drawings for the bathroom containers and parking lot.**

Minimum submission requirements for each phase submittal shall be as defined herein.

### 1.2.2 CONSTRUCTION SUBMITTALS

#### 1.2.2.1 Contractor Furnished Government Approved Construction Submittals

Government approved construction submittals are primarily related to plans (Contractor Quality Control, Accident Prevention, Resident Management System, Area Use, etc.) schedules (Project Schedule/Network Analysis), and certificates of compliance. They may also include proposed variations to approved design documents in accordance with the paragraph entitled "VARIATIONS".

#### 1.2.2.2 For Information Only Construction Submittals (FIO)

All submittals not requiring Designer of Record or Government approval will be for information only.

### 1.3 SUBMITTAL CERTIFICATION

The CQC organization shall be responsible for certifying that all submittals and deliverables have been reviewed in detail for completeness, are correct, and are in strict conformance with the contract drawings, specifications, and reference documents.

### 1.3.1 Effective Quality Control System

The Design-Build Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with Contract Clause 52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION - ALTERNATE I and specification section 01451 CONTRACTOR QUALITY CONTROL.

#### 1.3.1.1 Organizational Responsibility

The quality control system shall cover all design, construction, subcontractor, manufacturer, vendor, and supplier operations at any tier, both onsite and offsite.

#### 1.3.1.2 CQC System Manager Review and Approval

Prior to submittal, all items shall be checked and approved by the Design-Build Contractor's Quality Control (CQC) System Manager. If found to be in strict conformance with the contract requirement, each item shall be stamped, signed, and dated by the CQC System Manager. Copies of the CQC organizations review comments indicating action taken shall be included within each submittal.

#### 1.3.1.3 Determination of Compliance

Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer. The contractor shall submit all required documentation with submittals. The U.S. Army Corps of Engineer (USACE) will not accept partial submittals.

### 1.3.2 Responsibility for Errors or Omissions

It is the sole responsibility of the Design-Build Contractor to ensure that submittals do or do not comply with the contract documents. Government review, clearance for construction, or approval by the Contracting Officer shall not relieve the Design-Build Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract.

#### 1.3.2.1 Government Review

Government review, clearance for construction, or approval of post design construction submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory.

### 1.3.3 Substitutions

After design submittals have been reviewed and cleared for construction by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless justified as indicated in the paragraph entitled VARIATIONS.

### 1.3.4 Additional Submittals

In conjunction with Contract Clause 52.236-5 MATERIAL AND WORKMANSHIP. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work.

### 1.3.5 Untimely and Unacceptable Submittals

If the Design-Build Contractor fails to submit submittals in a timely fashion, or repetitively submits submittals that are incomplete or not in strict conformance with the contract documents, no part of the time lost due to such actions shall be made the subject of claim for extension of time or for excess costs or damages by the Design-Build Contractor.

#### 1.3.6 Stamps

Stamps shall be used by the Design-Build Contractor on all design and post design construction submittals to certify that the submittal meets contract requirements and shall be similar to the following:

Design-Build Contractor (Firm Name)  
Contract Number  
Contract Name

I certify that this submittal accurate, is in strict conformance with all contract requirements, has been thoroughly coordinated and cross checked against all other applicable disciplines to prevent the omission of vital information, that all conflicts have been resolved, and that repetition has been avoided and, it is complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer.

Name of CQC System Manager: \_\_\_\_\_

Signature of CQC System Manager: \_\_\_\_\_

Date: \_\_\_\_\_

#### 1.4 ENGLISH LANGUAGE

All specifications, drawings, design analysis, design calculations, shop drawings, catalog data, materials lists, and equipment schedules submitted shall be in the English language. However, the local language of host country shall be added to project as-built drawings.

#### 1.5 UNITS OF MEASUREMENT

Design documents shall be prepared in accordance with the guidance offered in SECTION 01415 METRIC MEASUREMENTS.

The metric units used are the International System of Units (SI) developed and maintained by the General Conference on Weights and Measures (CGPM); the name International System of Units and the international abbreviation SI were adopted by the 11th CGPM in 1960.

##### 1.5.1 Drawings

###### 1.5.1.1 Site Layout

All site layout data shall be dimensioned in meters or coordinates, as appropriate. All details and pipe sizes shall be dimensioned in millimeters.

EXAMPLE: Masonry openings shall be a U.S. module to suit a standard U.S. door. The dimensions of the opening shall be given in SI units. Metric dimensions for site plans shall be in meters and fraction thereof. Dimensions for all other drawings shall be in millimeters using hard metric designations (example: 12 meters = 12 000). Hard metric is defined as utilizing standard metric products and the use of measurements in increments of fifty (50) and one hundred (100) millimeters.

###### 1.5.1.2 Georeference

All site plans shall be geo-referenced using the WGS 1984 coordinate system, specifically the following: WGS 1984 UTM one 42 N. If the designer is not able to use the stated coordinate system the coordinate system used shall be correlated to the stated coordinate system. A table shall be provided within the site drawing set cross referencing the WGS84 system to that utilized. This is required to allow AED to incorporate the plans into GIS for storage, map production, and possible geospatial analysis of the different work sites.

#### 1.5.2 Design Calculations

Calculations shall be in SI units to meet the requirements of the design. Quantities on the contract drawings stated in SI units, shall also be stated in SI units in the design analysis to match the drawings.

#### 1.5.3 Specifications

All equipment and products shall be specified according to U.S. standards and described by appropriate units as required herein.

### 1.6 WITHHOLDING OF PAYMENT FOR SUBMITTALS

#### 1.6.1 Design Submittals

Payment for Design work will not be made in whole or in part until the Government has reviewed and cleared the design for construction.

#### 1.6.2 Construction Submittals

Payment for materials incorporated in the work will not be made if required approvals have not been obtained. In event under separate clause of the contract, the Design-Build Contractor is allowed partial or total invoice payment for materials shipped from the Continental United States (CONUS), and/or stored at the site, the Design-Build Contractor shall with his request for such payment, submit copies of approvals (ENG Form 4025) certifying that the materials that are being shipped and/or stored have been approved and are in full compliance with the contract technical specifications.

## PART 2 PRODUCTS

### 2.1 GENERAL

The following are contract deliverables which expound upon and finalize the design parameters/requirements outlined within the contract documents. They shall be prepared in such a fashion that the Prime Contractor is responsible to the Government and not as an internal document between the Prime Contractor and its Subcontractors, Vendors, Suppliers, etc.

### 2.2 PROJECT NARRATIVE

The Project Narrative shall be a bound set and shall contain the contract RFP, Sections 0101 and 01015. (add additional RFP sections that you need). The RFP Section 01010 and 01015 shall be the latest version. Any subsequent changes to the RFP shall be clearly marked and highlighted with explanation for the changes.

The Project Narrative shall also contain the general description of the project and a discussion of the design approach and design features for the project.

### 2.3 DESIGN ANALYSIS

#### 2.3.1 Submittal

A design analysis, written in the English Language with SI units of measure shall be submitted for review by the Government. The design analysis is a written explanation of the project design which is expanded and revised (updated) as the design progresses. The design analysis shall contain all explanatory material giving the design rationale for any design decisions which would not be obvious to an engineer reviewing the final drawings and specifications. The design analysis contains the criteria for and the history of the project design, including criteria furnished by the Government, letters, codes, references, conference minutes, and pertinent research. Design calculations, computerized and manual, are included in the design analysis. Narrative descriptions of design solutions are also included. Written material may be illustrated by diagrams and sketches to convey design concepts. Catalog cuts and manufacturer's data for all equipment items, shall be submitted. Copies of all previous design phase review comments and the actions assigned to them shall be included with each submission of the design analysis. Specific requirements for the design analysis, listed by submittal phase, are contained hereinafter.

### 2.3.2 Format

Format of design analysis shall closely match the standard format referenced within the request for proposal (RFP).

## 2.4 DESIGN CALCULATIONS

When they are voluminous, they shall be bound separately from the narrative part of the design analysis. The design calculations shall be presented in a clean and legible form incorporating a title page and index for each volume. A table of contents, which shall be an index of the indices, shall be furnished when there is more than one volume. The source of loading conditions, supplementary sketches, graphs, formulae, and references shall be identified. Assumptions and conclusions shall be explained. Calculation sheets shall carry the names or initials of the computer and the checker and the dates of calculations and checking. No portion of the calculations shall be computed and checked by the same person.

### 2.4.1 Automatic Data Processing Systems (ADPS)

When ADPS are used to perform design calculations, the design analysis shall include descriptions of the computer programs used and copies of the ADPS input data and output summaries. When the computer output is large, it may be divided into volumes at logical division points.

#### 2.4.1.1 Computer Printouts

Each set of computer printouts shall be preceded by an index and by a description of the computation performed. If several sets of computations are submitted, they shall be accompanied by a general table of contents in addition to the individual indices.

#### 2.4.1.2 Preparation of the Description

Preparation of the description which must accompany each set of ADPS printouts shall include the following.

- a. Explain the design method, including assumptions, theories and formulae.
- b. Include applicable diagrams, adequately identified.
- c. State exactly the computation performed by the computer.
- d. Provide all necessary explanations of the computer printout format, symbols, and abbreviations.

- e. Use adequate and consistent notation.
- f. Provide sufficient information to permit manual checks of the results.

## 2.5 SPECIFICATIONS

Specifications shall be prepared in accordance with the Construction Specifications Institute (CSI) format. The Design-Build Contractor prepared specifications shall include as a minimum, all applicable specification sections referenced by the CSI. Where the CSI does not reference a specification section for specific work to be performed by this contract, the Design-Build Contractor shall be responsible for creating the required specification.

### 2.5.1 Preparation of Proprietary Non-Generic Design Documents

During the course of design, the designer shall specify specific proprietary materials, equipment, systems, and patented processes by trade name, make, or catalog number. The subsequent use of construction submittals to supplant and/or supplement incomplete design effort is unacceptable. Design submittals containing non-proprietary and/or generic design criteria where proprietary items are available, will be returned for resubmission.

### 2.5.2 Use of Unified Facilities Guide Specifications (UFGS)

If UFGS are used, it is the sole responsibility of the Design-Build Contractor to prepare these specifications in strict conformance with the paragraph entitled PREPARATION OF PROPRIETARY NON-GENERIC DESIGN DOCUMENTS. UFGS containing non-proprietary and/or generic design criteria, where proprietary items are available, will be returned for resubmission. If the UFGS contains a "SUBMITTALS" paragraph, the Design-Build Contractor shall delete it and incorporate all required information directly into the design documents. Under no circumstances will the Design-Build Contractor be permitted to use submittals and shop drawings to finalize an incomplete design. UFGS (Uniform Federal Guide Specifications) are required for this project when U.S. products and systems are required or used. Current UFGS information may be obtained at the following location:  
[http://www.wbdg.org/ccb/browse\\_org.php?o=70](http://www.wbdg.org/ccb/browse_org.php?o=70).

Specifications for UFGS are in SpecsIntact format. SpecsIntact is government sponsored software used to edit specifications for government contracts. The software is available at the following link:  
<http://specsintact.ksc.nasa.gov/index.asp>.

### 2.5.3 Quality Control and Testing

Specifications shall include required quality control and further indicate all testing to be conducted by the Design-Build Contractor, its subcontractors, vendors and/or suppliers.

### 2.5.4 Ambiguities and indefinite specifications

Ambiguities, indefinite specification requirements (e.g., highest quality, workmanlike manner, as necessary, where appropriate, as directed etc) and language open to interpretation is unacceptable.

### 2.5.5 Industry Standards

#### 2.5.5.1 U.S. Industry Standards

The Specifications shall be based on internationally accepted U.S. industry Standards. Customarily accepted publications may be found in the UNIFIED MASTER REFERENCE LIST (UMRL) which may be located at the following URL: <http://www.hnd.usace.army.mil/techinfo/UFGS/UFGSref.htm>.

To access the UMRL select the "Unified Facilities Guide Specifications" tab and scroll down to Unified Master Reference List (UMRL) (PDF version).

Examples of U.S. standards are: National Fire Protection Association (NFPA), International Building Code (IBC), American Concrete Institute (ACI), American Water Works Association (AWWA), ADAAG (ADA Accessibility Guidelines) for Buildings and Facilities, etc. Standards referenced shall be by specific issue; the revision letter, date or other specific identification shall be included.

This document lists publications referenced in the Unified Facilities Guide Specifications (UFGS) of the Corps of Engineers (USACE), the Naval Facilities Engineering Command (NAVFAC), the Air Force Civil Engineer Support Agency (AFCEA), and the guide specifications of the National Aeronautics and Space Administration (NASA). This document is maintained by the National Institute of Building Sciences (NIBS) based on information provided by the agencies involved and the standards producing organizations. The listing is current with information available to NIBS on the date of this publication.

Standards referenced in specifications and drawings prepared by the Design-Build Contractor shall be by specific issue; the revision letter, date or other specific identification shall be included.

#### 2.5.5.2 Non U.S. Industry Standards

If non U.S. industry standards (e.g., codes, regulations, or technical references and norms) are authorized for use under this contract and are incorporated in the Design-Build Contractor's design, one (1) copy of each standard referenced shall be provided to the Government.

Where a U.S. design and/or construction standard cannot be referenced due to non-availability of products and/or systems, another specification format using the CSI guidelines may be utilized for that particular product and/or system. If a majority of the specifications within this project reference non-U.S. products due to availability and/or other factors, the entire set of specifications are not required to be in UFGS and SpecsIntact format.

#### 2.5.6 Incorporation of Government review comments

Subsequent to submission to the Government, the specifications shall be finalized by the incorporation of Government review comments.

### 2.6 DRAWINGS

Drawings, prepared in the English language with SI units of measure, are a part of each submittal. The working drawings shall be adequately labeled and cross-referenced for review. Complete, thoroughly checked and coordinated contract drawings shall be submitted. The contract drawings submitted for final review shall include the drawings previously submitted which have been revised and completed as necessary. The Design-Build Contractor shall have incorporated any design review comments generated by previous design review(s), have completed all of his constructability and coordination checks, and have the drawings in a Ready-to-Build condition. The drawings shall be complete at this time and contain all the details necessary to ensure a clear understanding of the work throughout construction.

#### 2.6.1 Drawing Size

Project is required to be in SI units, all drawings shall be prepared in size "A1" sheets (594mm by 841mm). If project is required to be in English units, all drawings shall be modified Architectural D size (24 inches by 36 inches) sheets. Design submissions may be prepared in half size (11 inches by 17 inches) to save paper and for ease of review. All final contract drawing sets shall be prepared with full size sheets. Drawings shall be trimmed to size if necessary.

## 2.6.2 Computer Assisted Design and Drafting (CADD)

Computer Assisted Design and Drafting (CADD) is required for all work related to this contract. The CADD deliverables shall meet the requirements of the AEC CAD Standard Release 2.0. Emphasis is on drawings meeting sheet layout standards, level/layer naming standards and sheet naming conventions. CAD standards may be found at the following link:

<https://tsc.wes.army.mil/products/standards/aec/aecstdweb.asp>. Transatlantic Programs Center Design Instructions Manual, Chapter 22 entitled COMPUTER ASSISTED DESIGN AND DRAFTING. The Contractor shall furnish the digital as-built drawing files in .DWG file format utilizing AutoDesk AutoCAD revision 2004 or later. Drawings prepared in any convention other than CADD, must have approval of the Contracting Officer.

## 2.6.3 Plotter Prepared Original Drawings

Plotter prepared original drawings shall be prepared on 20 pound bond paper, unless otherwise approved and shall be plotted on the matte side. Raster plotters must provide a minimum resolution of 400 dpi while vector plotters shall provide a minimum resolution of 0.0010 inch with an accuracy of +0.1% of the move and a repeatability error of not more than 0.005 inch. Drawings produced from dot matrix plotters are not acceptable. Plots accompanied by the digital design file may be prepared on vellum: translucent bond is not acceptable. Line density shall be equivalent to that produced by black India ink: half-tones and gray scale plots are not acceptable unless otherwise approved. Manual changes to plotted originals are not acceptable.

## 2.6.4 Half-Size Reduction

Preparation of all work shall accommodate half size reduction unless project is required to meet SI units or shall be instructed otherwise by the Contracting Officer.

## 2.6.5 Symbols and Abbreviations

Symbols and abbreviations shall be in accordance with AEC CAD Standard Release 2.0 or later /or conform to the symbols used with a CADD program such AutoDesk AutoCAD release 2004 or greater.

## 2.6.6 Design Discipline Designation Format

Referencing AEC CAD Standard Release 2.0, the drawing package shall be divided into the following proposed divisions as shown in chronological order:

Use the following for AEC CAD Standard Release 2.0:

<u>Discipline Designation</u>	<u>Discipline</u>
C	Civil
A	Architectural
S	Structural
P	Plumbing
M	Mechanical
E	Electrical
F	Fire Protection

Each drawing for the particular facility shall be designated by the discipline designation and sheet number and shall be consecutive within each discipline. AEC CAD Standard, referenced herein, shall be adhered to, especially with regard to sheet naming, numbering and level/layer naming standards. Copies of level/layer naming standards are available at the following locations (in comma delimited format - .CSV) and may be imported into Microstation and/or AutoCAD release 2000 or later:

Public FTP site:

[ftp://anonymous@ftp.usace.army.mil/pub/aed/Standards/AEC\\_Nat\\_CAD\\_Std/level\\_libs/](ftp://anonymous@ftp.usace.army.mil/pub/aed/Standards/AEC_Nat_CAD_Std/level_libs/)

SharePoint site:

[https://aedsharepoint.tac.usace.army.mil/C16/Drawings/Document%20Library/AEC\\_CAD\\_level\\_templates.ZIP](https://aedsharepoint.tac.usace.army.mil/C16/Drawings/Document%20Library/AEC_CAD_level_templates.ZIP)

#### 2.6.7 Grouping Drawings

A building or individual facility design shall, except for site development drawings, be grouped in the design drawing package so that a single building may be withdrawn by deleting or removing a consecutive block of sheets.

#### 2.6.8 Title and Revision Block

Title and revision block shall match FIGURES 1 through 5 furnished in the paragraph entitled ATTACHMENTS.

#### 2.6.9 Drawing Scales

The scales indicated on the following list shall, in general, be used for all drawings. The Contractor may, at its option, make exceptions to scales indicated, if approved in writing by the Contracting Officer.

Site, Grading and Utility Plans - 1:500, if in SI units

Key Plans as large as practical

Cross Sections/elevations (as large scale as possible to adequately show required detail) - 1:100, if in SI units

Details - 1:10 minimum, if in SI units

#### 2.6.10 Binding

All volumes of drawing prints shall be firmly bound and shall have covers of heavier bond than the drawing sheets. If posts are used to fasten sheets together, the drilled holes on the bond edges of the sheets shall be on 8-1/2-inch centers.

#### 2.6.11 Typical Sheets

Typical sheets of standard details uniformly used on all buildings are authorized and encouraged. Sheets of standard details may be prepared so that they can be reused if the design package must be divided into separate construction packages. Each typical detail drawing sheet may be limited to a particular design discipline. Standard detail sheets shall be organized by discipline as are the other drawing sheets. Details peculiar to one facility shall not be shown in the standard details but with the group of drawings for the facility to which it pertains.

#### 2.6.12 Index Sheet(s)

The first sheet of each volume in a project shall be a cover sheet. In general, the second sheet shall be the first index. Multiple index sheets may be required, depending on the project size. All index sheets shall be included with each volume of drawings and shall be an index of all the individual drawings in all volumes. The index shall list sequentially the site development drawings, each facility's drawings, and the standard details drawings (if any), and shall locate them by volume and file number. Each index sheet shall be signed and stamped by a principal of the Design-Build Contractor.

#### 2.6.12 A Sheet page numbers

All discipline sheets shall be numbered in numbering sequence from 1 of #

Example: discipline =A

A

1 of 198 and followed numerically from 1 to (198 of 198)

#### 2.6.13 Drawing File Number

The File Number is unique to each drawing and is a combination of a project location code, project number, facility designator and the CADD file name. Unassigned numbers or skipped sheets shall be labeled as "Not Used" on the index sheets. Cover sheets are not numbered.

#### 2.6.14 Specifications Placed on the Drawings

Details of standard products or items which are adequately covered by specifications shall not be included on the drawings.

#### 2.6.15 Legends

For each submittal, legends of symbols and lists of abbreviations shall be placed on the drawings. They shall include all of the symbols and abbreviations used in the drawing set, but shall exclude any symbols and abbreviations not used. Since many symbols are limited to certain design disciplines, there is a definite advantage to the use of separate legends on the initial sheet of each design discipline or in the Standard Details package for each discipline. If legends have not been shown by discipline, a legend shall be placed on the first drawing.

#### 2.6.16 Location Grid

To facilitate the location of project elements and the coordination of the various disciplines' drawings, all plans shall indicate a column line or planning grid, and all floor plans (except structural plans) shall show room numbers.

#### 2.6.17 Composite and Key Plans

If the plan of a large building or structure must be placed on two or more sheets in order to maintain proper scale, the total plan shall be placed on one sheet at a smaller scale. Appropriate key plans and match lines shall appear on segmented drawings. Key plans shall be used not only to relate large scale plans to total floor plans but also to relate individual buildings to complexes of buildings. Key plans shall be drawn in a convenient location and shall indicate the relative location of the represented plan area by crosshatching.

#### 2.6.18 Revisions

Drawing revisions shall be prepared only on the original CADD files. A revision area is required on all sheets.

### PART 3 EXECUTION

#### 3.1 GENERAL

##### 3.1.1 Design Concept Coordination Meeting

In addition to regular meetings with the Government the Contractor shall conduct formal status briefings on a monthly basis, as a minimum, to provide a management overview of design

development. Shortly after contract award the Government may choose to conduct meetings with the Design-Build Contractor to refine proposal concept features. The purpose of the meeting is to assure attention to project requirements and to suggest ways of improving the design prior to tentative level submissions.

### 3.1.2 Government Design Changes

Government design changes which do not increase construction costs shall be made at no charge to the Government. The Contracting Officer may request design submittals in addition to those listed when deemed necessary to adequately describe the work covered in the contract documents. Submittals shall be made in the respective number of copies and to the respective addresses set forth in the paragraph entitled SUBMITTAL PROCEDURE. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

## 3.2 SUBMITTAL REGISTERS

### 3.2.1 Contractor-Furnished Design Documents Submittal Register (TAC Form 122-E)

#### 3.2.1.1 General

The Contractor shall submit as part of his Project Schedule, information regarding the submittal and clearance for construction of Contractor furnished design documents. In addition, the Contractor shall provide a complete submittal register in the sample format (TAC Form 122-E - Contractor Furnished Design Documents Submittal Register) which is attached to this section. The Contractor shall, within fifteen (15) calendar days after approval of the Project Schedule, submit 3 copies of his finalized Contractor Furnished Design Document Submittal Register to the Contracting Officer for approval. The submittal register shall consist of a tabulation of all the Contractor furnished design documents with the indicated dates integrated into the Design Progress Schedule. The Contractor shall post all actual dates of submittal actions (including clearance for construction) as they occur.

#### 3.2.1.2 Additions or Revisions

Any additions or changes required to be made to the TAC Form 122-E as a result of the Contracting Officer's review shall be incorporated into the TAC Form 122-E by the Contractor and a re-submittal of 35% and 100% design submittals and (3) copies shall be affected within five (5) calendar days after receipt of the Contracting Officer's review comments.

#### 3.2.1.3 Submission Requirements

A copy of the initial TAC Form 122-E and each monthly update prepared by the Contractor, shall be submitted to

#### AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District  
House # 1, St. #1 West  
West Wazir Akbar High School  
Behind Amani High School  
Kabul, Afghanistan  
Attn.: Tony Lijewski

(2) U.S. Postal Service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District (CEAED-EC)

Attn.: Qalaa House  
APO AE 09356]

#### TRANSATLANTIC PROGRAMS CENTER

U.S. Army Corps of Engineers  
Transatlantic Programs Center (CETAC-EC-TT-QC Attn: Judy Funkhouser)  
201 Prince Frederick Drive  
Winchester, Virginia 22602

#### 3.2.2 Construction Submittal Register (ENG Form 4288)

Attached to this section is ENG Form 4288 which the Contractor is responsible for developing for this contract. All construction submittals shall be shown on this register. The submittal register shall be the controlling document and will be used to control all construction submittals throughout the life of the contract. The Contractor shall maintain and update the register on a monthly basis for the Contracting Officer's approval.

#### 3.3 TRANSMITTAL FORM (ENG Form 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both design and construction submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care will be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

#### 3.4 PROGRESS SCHEDULE

The Contractor shall prepare and submit a design progress schedule to the Contracting Officer. The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The progress schedule shall show, as a percentage of the total design price, the various items included in the contract and the order in which the Contractor proposes to carry on the work, with dates on which he will start the features of the work and the contemplated dates for completing same. Significant milestones such as review submittals shall be annotated. The Contractor shall assign sufficient technical, supervisory and administrative personnel to insure the prosecution of the work in accordance with the progress schedule. The Contractor shall correct the progress schedule at the end of each month and shall deliver Submittal section AED (3) copies to the Contracting Officer. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

#### 3.5 SCHEDULING

##### 3.5.1 Design Submittals

Adequate time (a minimum of fourteen (14) calendar days exclusive of mailing time) shall be allowed for review and clearance for construction. If the Contractor fails to submit design submittals in a timely fashion, or repetitively submits design submittals that are not in strict conformance with the contract documents, no part of the time lost due to such actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

##### 3.5.2 Post Design Construction Submittals

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of fourteen (14) calendar days

exclusive of mailing time) shall be allowed for review and approval. If the Contractor fails to submit post design construction submittals in a timely fashion, or repetitively submits submittals that are not in strict conformance with the contract documents, no part of the time lost due to actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

### 3.6 SUBMITTAL PROCEDURE

#### 3.6.1 Design Submittals

##### 3.6.1.1 Afghanistan Engineer District (AED)

Two (2) hard copies and one soft copy\_(1) copies of all design submittals shall be transmitted to the Government at the following address by means of ENG Form 4025:

#### AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District  
House # 1, St. #1 West  
West Wazir Akbar High School  
Behind Amani High School  
Kabul, Afghanistan  
Attn.: [ ]

(2) U.S. Postal Service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District (CEAED-EC)  
Attn.: Qalaa House  
APO AE 09356

#### TRANSATLANTIC PROGRAMS CENTER

U.S. Army Corps of Engineers  
Transatlantic Programs Center  
ATTN: CETAC-EC-TT-QC (J. Funkhouser)  
201 Prince Frederick Drive  
Winchester, Virginia 22602

One (1) set of designs (3) copies of all design submittals shall be transmitted to the Government at the following address by means of ENG Form 4025:

#### TRANSATLANTIC PROGRAMS CENTER

U.S. Army Corps of Engineers  
Transatlantic Programs Center  
ATTN: CETAC-EC-TT-QC (J. Funkhouser)  
201 Prince Frederick Drive  
Winchester, Virginia 22602

The drawings shall be submitted in full size and half size formats unless otherwise noted.

For the Afghanistan Engineer District and/or field office, the Contractor shall submit two (1) full size and one (2) half size sets of drawings and a complete set of specification, design analysis and a soft copy on CD-ROM of all of the listed herein.

### 3.6.1.2 Resident/Area Engineer Office

Two (2) half size copies and one (1) full size additional copy of each design submittal shall be transmitted to the overseas field office administering the construction portion of the contract at the following address:

Transatlantic Program Center

The drawings shall be submitted in electronic file format unless otherwise noted.

### 3.6.1.3 Deliverables "Cleared for Construction"

Once the Design Documents have been "Cleared for Construction" by the Contracting Officer, the Design-Build Contractor shall clearly identify each document by annotating it as "Cleared for Construction". One (1) complete hardcopy and CD set of all finalized design documents shall be submitted to the Government as follows:

#### AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:

U.S. Army Corps of Engineers

Afghanistan Engineer District

House # 1, St. #1 West

West Wazir Akbar High School

Behind Amani High School

Kabul, Afghanistan

Attn: Engineering Section

(2) U.S. Postal Service:

U.S. Army Corps of Engineers

Afghanistan Engineer District (CEAED-EC)

Attn.: Qalaa House

APO AE 09356

#### TRANSATLANTIC PROGRAMS CENTER

U.S. Army Corps of Engineers

Transatlantic Programs Center

ATTN: CETAC-EC-TT-QC (J. Funkhouser)

201 Prince Frederick Drive

Winchester, Virginia 22602

Resident Area Engineer Office AED

Field office or site location of design project.

This is a Design-Build project and in accordance with Contract Clause 52.227-7022 GOVERNMENT RIGHTS (UNLIMITED), the Government has non-exclusive rights to use the design on other projects. Therefore, the As-Builts furnished to the Government must be in an editable format.

### 3.6.1.4 Editable CADD Format As-Builts

In accordance with section 01060 SPECIAL CLAUSES clause PREPARATION OF AS-BUILT DRAWINGS (CONTRACTOR), one (1) set of the Government approved As-Builts shall be submitted to the following address in an editable CADD format:

#### AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:  
U.S. Army Corps of Engineers  
Afghanistan Engineer District  
House # 1, St. #1 West  
West Wazir Akbar High School  
Behind Amani High School  
Kabul, Afghanistan  
Attn: Engineering Section

(2) U.S. Postal Service:  
U.S. Army Corps of Engineers  
Afghanistan Engineer District (CEAED-EC)  
Attn.: Qalaa House  
APO AE 09356

This requirement is in addition to all other submission requirements stated elsewhere in the contract.

### 3.6.1.5 Digital Transmission of Design Submittals

The Design-Build Contractor shall submit design deliverables addressed by this specification in digital format. The following procedure shall be followed:

a. USE OF FILE TRANSFER PROTOCOL (FTP) SERVER. The Design-Build contractor will download all design files on either its own File Transfer Protocol (FTP) Server, the Corps FTP Server or as otherwise directed. Afghanistan Engineer District (AED) prefers that the contractor provide the soft copy of design submittals be burned to CD-ROM and submitted as such. The procedure to be followed will be established at the Pre-Construction Conference and the appropriate log-in and password information will be exchanged between the Government and the Design-Build Contractor.

NOTE: AED accepts AutoCad release 2004 or higher drawing file format as the standard due to the fact that the local region does not support Microstation

b. TRANSLATED OR CONVERTED FILES DRAWING FILES. Digital drawing files shall be prepared as indicated in the paragraph entitled COMPUTER ASSISTED DESIGN AND DRAFTING (CADD). Under NO circumstances shall the Design-Build Contractor translate (or convert) the files from AutoDesk AutoCAD to Bentley Microstation.

c. NOTIFICATION. The Design-Build Contractor shall notify all recipients by email that the Design submittal has been downloaded to the designated FTP server or electronically provided on a CD and is ready for Government review. This email shall include a scanned copy of the ENG Form 4025 signed by the Design-Build Contractor's Contractor Quality Control (CQC) Organization. It shall also include an updated digital copy of TAC Form 122-E. The Government will use the digital submittal as an advance copy pending receipt of an official hardcopy version in accordance with the paragraph entitled SUBMITTAL PROCEDURE. Subsequent to a period of demonstrated successful performance, the Government may elect to eliminate the requirement to submit an official hardcopy version.

The TAC Form 122-E shall be prepared in a spread sheet software that readily allows the file to be saved as a \*.CSV file that can subsequently be imported into the Corps of Engineers Resident Management System (RMS) software.

d. RETURN OF GOVERNMENT REVIEWED SUBMITTALS. Subsequent to the Government review, the Eng Form 4025 with comments (if applicable) will be returned to the Design-build Contractor digitally by email. Hardcopies of these documents will subsequently be submitted to the

Design-Build Contractor via the United States Postal Service (USPS). The Government may elect to stop sending hardcopies if it deems that digital transmission of design submittals is progressing satisfactorily.

e. SUPPLEMENTAL ACTIONS. All supplemental actions, resubmittals, and subsequently scheduled submissions shall be performed by the Design-Build contractor as indicated within this paragraph.

AED: As-builts shall be prepared and submitted in .DWG format utilizing AutoDesk AutoCad release 2004 or higher format.

### 3.6.2 Post Design Construction Submittals

Three (3) copies of all post design construction submittals shall be transmitted to the overseas district office administering the construction portion of the contract at the following address:

#### AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District  
House # 1, St. #1 West  
West Wazir Akbar High School  
Behind Amani High School  
Kabul, Afghanistan  
Attn: Engineering Section

(2) U.S. Postal Service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District (CEAED-EC)  
Attn.: Qalaa House  
APO AE 09356

Submittal area of the AED engineering section

One (1) additional copy of each Post Design Construction submittal shall be transmitted to the Government at the following stateside address by means of ENG Form 4025:

#### TRANSATLANTIC PROGRAMS CENTER

U.S. Army Corps of Engineers  
Transatlantic Programs Center  
ATTN: CETAC-EC-TT-QC (J. Funkhouser)  
201 Prince Frederick Drive  
Winchester, Virginia 22602

Shop Drawing section

Submittals of Operations and Maintenance (O & M) Manuals in sets of (3) three copies shall be as follows:

#### AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District

House # 1, St. #1 West  
West Wazir Akbar High School  
Behind Amani High School  
Kabul, Afghanistan  
Attn: Engineering Section

(2) U.S. Postal Service:  
U.S. Army Corps of Engineers  
Afghanistan Engineer District (CEAED-EC)  
Attn.: Qalaa House  
APO AE 09356

### 3.6.3 Submittal Numbering System

Instructions on the numbering system to be used for construction submittals follows:

#### 3.6.3.1 Submittals

Shop drawings and materials are listed on the Submittal Register (ENG Form 4288) as follows:

- a. List is prepared according to contract specifications and drawings, picking up all items involved in the project.
- b. This list is divided into sections as indicated in the specifications for example:

Sec 01015	"Technical Requirements"
Sec 01335	"Design Submittals"
Sec. 02831	"Chain-Link Fence"
Sec. 02710	"Subdrainage System"
Sec 03300	"Concrete For Building Construction"
Sec. 04200	"Masonry"

#### 3.6.3.2 Numbering procedures for transmittal on ENG FORM 4025

- a. Each section, may include a list of items. All these items will then be listed with a progressive number within the sections they belong to, for example:

Sec. 01015	will have 01015.00 (Basic number)
Item x	" " 01015.01
Item y	" " 01015.02
Item z	" " 01015.03

Sec. 01335	will have 01335.00 (Basic number)
35% design drawings	" " 01335.01
100% design drawings	" " 01335.03

Sec. 02710	will have 02710.00 (Basic number)
Item x	" " 02710.01
Item y	" " 02710.02
Item z	" " 02710.03

Sec. 02600	will have 02600.00 (Basic number)
Item x	" " 02600.01
Item y	" " 02600.02

Sec. 03300	will have 03300.00 (Basic number)
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Item x       "   " 03300.01  
Item y       "   " 03300.02  
etc.

b. It is evident a transmittal will never show a Section number i.e., 02831.00, 03300.00, etc., since these are only the basic numbers of the system. Numbers on transmittals will be the item numbers, i.e., 01015.01, 02710.01, 02710.02, 02710.03, 03300.01, 03300.02, etc. All items, as listed on the Submittal Register, will be submitted via a separate transmittal form ENG FORM 4025 thus avoiding getting together more than one item (as listed) and more than one number. There are items, on the other hand, which may be submitted all together on the same transmittal form. This must be established before submission is made.

c. Sec. 10800 "Toilet Accessories" - this section will have basic number 10800.00 - all items relative to it will be listed one by one on separate lines. ONLY one transmittal number will then be given for all of these "10800.01" which will include i.e., robe hook, toilet paper holder, mirror, soap holder, cabinet for paper towels, etc. Each one of these items will be listed on the same Transmittal Number 10800.01 as item 1, item 2, item 3, etc.

For design reviews the standard Corps of Engineers method of review is through DrChecks through projnet <https://www.projnet.org/projnet/binKornHome/index.cfm> All of AED design submittal reviews shall be done through DrChecks.

### 3.6.3.3 Resubmittals

Should the Contractor be required to resubmit any transmittal, it will be accomplished by utilizing the same transmittal number followed by the number "-1" for the first resubmittal, "-2" for the second resubmittal, "-3" for the third resubmittal, etc. For example, a first resubmittal would be "SUBMITTAL PROCEDURES FOR DESIGN BUILD PROJECT" 01335.01-1, a second resubmittal 01335.01-2, etc. The purpose of this system is to avoid deviations from Submittal Register and, to avoid confusion arising from the use of more than one number on transmittal when more than one item is submitted on the same form. This system will also facilitate the use, wherever required, on machine printouts.

### 3.6.4 Variations

If design documents or construction submittals show variations from the contract parameters and/or requirements, the Contractor shall justify such variations in writing, at the time of submission. Additionally, the Contractor shall also annotate block "h" entitled "variation" of ENG FORM 4025. After design submittals have been reviewed and cleared for construction by the Contracting Officer, no resubmittal for the purpose of substituting materials, equipment, systems, and patented processes will be considered unless accompanied by the following:

- a. Reason or purpose for proposed variation, substitution, or revision.
- b. How does quality of variation compare with quality of the specified item? This shall be in the form of a technical evaluation tabulating differences between the item(s) originally specified and what is proposed.
- c. Provide a cost comparison. This shall include an acquisition and life cycle cost comparison.
- d. For proprietary materials, products, systems, and patented processes a certification signed by an official authorized to certify in behalf of the manufacturing company that the proposed substitution meets or exceeds what was originally specified.
- e. For all other actions, a certification signed by a licensed professional engineer or architect certifying that the proposed variation or revision meets or exceeds what was originally specified.

f. Advantage to the Government, if variation is approved, i.e. Operation and Maintenance considerations, better product, etc.

g. Ramifications and impact, if not approved.

If the Government review detects any items not in compliance with contract requirements or items requiring further clarification, the Contractor will be so advised. Lack of notification by the Contracting Officer of any non-complying item does not relieve the Contractor of any contractual obligation.

### 3.6.5 Non-Compliance

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the worksite, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

## 3.7 REVIEW OF CONTRACTOR PREPARED DESIGN DOCUMENTS

### 3.7.1 General

The work under contract will be subject to continuous review by representatives of the Contracting Officer. Additionally, joint design review conferences with representation by all organizations having a direct interest in the items under review may be held. The Design-Build Contractor shall furnish copies of all drawings and related documents to be reviewed at the review conference on or before the date indicated by the Government. Additional conferences pertaining to specific problems may be requested by the Design-Build Contractor or may be directed by the Contracting Officer as necessary to progress the work. The Design-Build Contractor shall prepare minutes of all conferences and shall furnish two copies to the Contracting Officer within seven (7) days after the conference.

### 3.7.2 Independent Design Review

The Design-Build Contractor shall have someone other than the Designer or Design Team perform an independent review of all specifications, drawings, design analysis, calculations, and other required data prior to submission to the Government. Upon completion of this review, the Design-Build Contractor shall certify that each design submittal is complete, accurate, is in strict conformance with all contract requirements, that repetition has been avoided, that all conflicts have been resolved, and that the documents have thoroughly coordinated and cross checked against all the applicable disciplines to prevent the omission of vital information.

### 3.7.3 Contractor's Quality Control Organization Review

This review shall be for the purposes of eliminating errors, interferences, and inconsistencies, and of incorporating design criteria, review comments, specifications, and any additional information required. Design submittals submitted to the Contracting officer without evidence of the Contractor's certified approval will be returned for resubmission. No part of the time lost due to such resubmissions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

Action Code on Eng Form 4025 the "G - Other (specify)" Code must be used. ENG Forms 4025 and 4026 will be annotated as follows:

G - Cleared for Construction

- G – Cleared for Construction, except as noted in attached comments
- G – Cleared for Construction, except as noted in attached comments, resubmission required
- G -- NOT Cleared for Construction, see attached comments, resubmission required
- FX – Receipt acknowledged, does not comply as noted with contract requirements.

NOTE: Cleared for construction does not relieve the Design-Build Contractor from the responsibility for any errors or omissions in the design, nor from responsibility for complying with the requirements of this contract.

#### 3.7.4 Government Review

Within 14 days after Notice to Proceed, the Contractor shall submit, for approval, a complete design schedule with all submittals and review times indicated in calendar dates. The Contractor shall update this schedule monthly. After receipt, the Government will be allowed fourteen (14) days to review and comment on the 35% a design submittal and fourteen (14) days to review and comment on the 100% design submittal, except as noted below. For each design review submittal, comments from the various design sections and from other concerned agencies involved in the review process will be made in the on-line review management system DrChecks<sub>SM</sub> (<https://www.projnet.org/projnet/binKornHome/index.cfm>). Contractor shall coordinate with the Contracting Officer and/or Representative(s) to register for DrChecks<sub>SM</sub> use. The review will be for conformance with the technical requirements of the solicitation and the Successful Offeror's (Contractor's) RFP proposal.

If a design submittal is deficient, it will be returned for correction and resubmission. The review time will begin when the corrected submittal is received.] The design-build contractor may be liable for liquidated damages owed to the Government for returned design submittals due to deficiencies.

[The contractor shall not begin construction work until the Government has reviewed the contractor's design and has cleared it for construction. Clearance for construction does not mean Government approval. Government review shall not be construed as a complete check but will evaluate the general design approach and adherence to contract parameters. The Government Review is often limited in time and scope. Therefore, the Contractor shall not consider any review performed by the Government as an excuse for incomplete work. Upon completion of the review, all comments will be forwarded to the Contractor. The Contracting Officer will indicate whether the design submittal has or has not been cleared for construction using the following action codes:

- A – Cleared for Construction
- B – Cleared for Construction, except as noted in attached comments
- C – Cleared for Construction, except as noted in attached comments, resubmission required
- E - NOT Cleared for Construction, see attached comments, resubmission required
- FX – Receipt acknowledged, does not comply as noted with contract requirements.

These codes shall NOT be used by the Design-Build Contractor. Design-Build Contractor's Quality Control Organization will annotate Block "g" entitled "FOR CONTRACTOR USE CODE" of Eng Form 4025-R using the action codes listed on the reverse side of the form.

Design submittals Cleared for Construction by the Contracting Officer shall not relieve the Contractor from responsibility for any design errors or omissions and any liability associated with such errors, nor from responsibility for complying with the requirements of this contract.

#### 3.7.4.1 Incorporation of Government Review Comments

If the Contractor disagrees technically with any comment or comments and does not intend to comply with the comment, he must clearly outline, with ample justification, the reasons for noncompliance within five (5) days after close of review period in order that the comment can be resolved. The Contractor shall furnish disposition of all comments in DrChecks<sub>SM</sub>, with the next scheduled submittal. The disposition shall identify action taken with citation of location within the relevant design document. Generalized statements of intention such as "will comply" or "will revise the specification" are not acceptable. The Contractor is cautioned that if he believes the action required by any comment exceeds the requirements of this contract, that he should flag the comment in DrChecks<sub>SM</sub> as a scope change, and notify the COR in writing immediately. If a design submittal is over one (1) day late in accordance with the latest design schedule, the Government review period may be extended 7 days. Submittals date revisions must be made in writing at least five (5) days prior to the submittal. During the design review process, comments will be made on the design submittals that will change the drawings and specifications. The Government will make no additional payments to the Contractor for the incorporation of comments. Review comments are considered part of the design-build process.

The Contractor will be furnished comments from the various design sections of the Corps of Engineers, Afghanistan Engineer District (AED) and / or Europe District (EUD) and / or Transatlantic Programs Center (TAC), as well as from other concerned agencies involved in the review process. The review will be for conformance with the technical requirements and parameters of the contract documents. The Contractor shall either incorporate each comment or, if the Contractor disagrees technically and does not intend to comply with the comment(s), the contractor shall clearly outline, with ample justification, its reasons for its noncompliance within five (5) days after receipt of the comment(s). Additionally, the Contractor is cautioned in that if it believes the action required by any comment exceeds the requirements of this contract, that he should take no action and notify the Contracting Officer in writing immediately. The disposition of all comments shall be furnished in writing with the next scheduled submittal. The review comments and the submittal material for each design review will become the basis for any ensuing design work. Copies of the design review comments with the action taken on each comment noted, shall be bound in all succeeding volumes of the design analysis.

#### 3.7.4.2 Conferences

As necessary, conferences will be conducted between the Design-Build contractor and the Government to resolve review comments.

A review conference will be held for each design submittal. The review conference will be held at the Corps District Office in Kabul, Afghanistan. The Contractor shall bring the personnel that developed the design submittal to the review conference.

#### 3.7.4.3 Design Deficiencies

Design deficiencies noted by the Government shall be corrected prior to the start of design for subsequent features of work which may be affected by, or need to be built upon, the deficient design work.

#### 3.7.5 Design Discrepancies

The Design-Build Contractor shall be responsible for the correction of incomplete design data, omissions, and design discrepancies which become apparent during construction. The Design-Build

Contractor shall provide the Contracting Officer with a proposed recommendation for correcting a design error, within three (3) calendar days after notification by the Contracting Officer. The Contracting Officer will notify the Design-Build Contractor of any detected noncompliance with the foregoing requirements. The Design-Build Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Design-Build Contractor at the worksite, shall be deemed sufficient for the purpose of notification. If the Design-Build Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Design-Build Contractor. Should extensions of design, fabrication plans and/or specific manufacturer's details be required as a result of a Government issued Change Order, the Government will make an equitable adjustment in accordance with Contract Clause 52.243-4 entitled CHANGES.

### 3.8 Phased or "Fast-Track" Design

#### 3.8.1 General

If approved by the Government, design and construction sequencing may be effected on an incremental basis as each approved phase or portion (e.g., demolition, geotechnical, site work, exterior utilities, foundations, substructure, superstructure, exterior closure, roofing, interior construction, mechanical, electrical, etc.) of the design is completed.

##### 3.8.1.1 Design Phases

Complete or partial design phasing may or may not have been specified by the Government elsewhere in this contract. For construction sequencing or phasing that the Government has not specifically mandated, the Design-Build Contractor may submit a proposed phasing plan. Design phasing proposed by the Design-Build Contractor shall be submitted to the Government for approval in accordance with TAC Form 122-E CONTRACTOR FURNISHED DESIGN DOCUMENTS.

#### 3.8.2 Sequence of Design-Construction (Fast-Track)

After receipt of the Contract Notice to Proceed (NTP) the Contractor shall initiate design, comply with all design submission requirements and obtain Government review of each submission. The contractor may begin construction on portions of the work for which the Government has reviewed the final design submission and has determined satisfactory for purposes of beginning construction. The Contracting Officer will notify the Contractor when the design is cleared for construction. The Government will not grant any time extension for any design resubmittal required when, in the opinion of the Government, the initial submission failed to meet the minimum quality requirements as set forth in the contract.

#### 3.8.3 Notice-to-Proceed for Limited Construction

If the Government allows the Contractor to proceed with limited construction based on pending minor revisions to the reviewed Final Design submission, no payment will be made for any in-place construction related to the pending revisions until they are completed, resubmitted and are satisfactory to the Government.

#### 3.8.4 In-Place Construction Payment

No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

#### 3.8.5 Commencement of Construction

Construction of work may begin after receipt of the clearance for construction (Notice to Proceed) for each design phase. Any work performed by the Contractor prior to receipt of the clearance for construction, shall be at the Contractor's own risk and expense. Work cleared for construction that does not conform to the design parameters and/or requirements of this contract shall be corrected by the Contractor at no additional cost or time to the Government.

### 3.9 DESIGN STAGES

The Contractor shall schedule the number and composition of the design submittal phases. Design submittals are required at the Concept (35%) and Final 99% design stages and at the 100% Ready-to-Advertise stage. The requirements of each design stage are listed hereinafter. The number and contents of the design submittals phases shall be reflected in TAC Form 122-E as well as in the Contractor's design progress schedule.

#### 3.9.1 Concept Review Submittal (35%)

The review of this submittal is primarily to ensure that the Contractor has taken an inventory of the existing conditions at each proposed site, has established the most desirable functional relationships between the various project elements, has provided the technical solution to how the functional and technical requirements will be met, and to show Contractor compliance (or justify noncompliance) with the design parameters and/or requirements. Refer to requirements herein for specific submittal requirements. The following documents shall be submitted:

- Site topographic survey
- Grading plan
- 35% drawings for site plan, grading, utilities
- 35% drawings for buildings, facilities
- List of Specification Sections to be used
- Preliminary design analysis

#### 3.9.2 Final Review Submittal 100%

The review of this submittal is to insure that the design is in accordance with directions provided the Contractor during the design process. The only effort remaining between the FINAL DESIGN REVIEW SUBMITTAL and the "CLEARED FOR CONSTRUCTION" DESIGN REVIEW SUBMITTAL is the incorporation of the Government Review Comments. The Contractor shall submit the following documents for Final review:

a. Design Analysis, developed to a 99% design stage. The Design Analysis shall be in its final form. It shall include all backup material previously submitted and revised as necessary. All design calculations shall be included. The Design Analysis shall contain all explanatory material giving the design rationale for any design decisions which would not be obvious to an engineer reviewing the Final Drawings and Specifications.

b. 99% Complete Construction Specifications. The Draft Specifications on all items of work submitted for Final Review shall consist of marked-up proprietary specifications.

c. 99% Complete Construction Drawings. The Contract Drawings submitted for Final Review shall include the drawings previously submitted which have been revised and completed as necessary. The Contractor is expected to have completed all of his coordination checks and have the drawings in a design complete condition. The drawings shall be finalized at this time including the incorporation of any design review comments generated by the Preliminary design review. The drawings shall contain all the details necessary to assure a clear understanding of the work throughout construction.

d. The Government's 35% and 100% Design Review Comments with the Contractor's annotation to each comment.

#### 3.9.4 "Cleared for Construction" Design Review Submittal (100%)

After the FINAL DESIGN REVIEW SUBMITTAL review, the Contractor shall revise the Contract Documents by incorporating any comments generated during the FINAL DESIGN REVIEW SUBMITTAL and shall prepare final hard copy Construction Specifications. The Contractor shall submit the following documents for the design complete submittal:

- a. Design Analysis
- b. Construction Specifications
- c. Construction Drawings
- d. A soft copy (CD) of the design drawings, specifications, and design analysis shall be submitted at this stage and all other subsequent stages of the design process.
- e. The Government's FINAL (99%) DESIGN REVIEW SUBMITTAL comments with the Contractor's annotation to each comment.

Once the design documents have been "Cleared for Construction" by the Contracting Officer, the Design-Build Contractor shall clearly identify each document by annotating it as "Cleared for Construction."

#### 3.9.5 Partial Design Submittals

In the interest of expediting construction, the Contracting Officer may approve partial design submittals, procurement of materials and equipment, as well as issue the Notice To Proceed (NTP) for construction of those elements of the design which have been cleared for construction. Such partial notices to proceed shall be solely at the discretion of the Contracting Officer.

#### 3.9.6 Design Submittals not in compliance with the contract documents

The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its design analysis, specifications, and drawings, and promptly furnish a corrected submittal in the form and number of copies as specified for the initial submittal. No part of the time lost due to such resubmissions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice shall be given promptly to the Contracting Officer.

### 3.10 GENERAL DESIGN INSTRUCTIONS

#### 3.10.1 Responsibility of the Design-Build Contractor

##### 3.10.1.1 Professional Quality, Technical Accuracy, and Coordination

The Design-Build Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all design specifications, drawings, and other services furnished under this contract. Work must be organized in a manner that will assure thorough coordination between various details on drawings, between the various sections of the specifications, and between the drawings and specifications. The Design-Build Contractor shall thoroughly cross-check and coordinate all work until he is professionally satisfied that no conflicts exist, vital information has not been omitted, and that indefinite language open to interpretation has been resolved.

##### 3.10.1.2 Deviating From The "Cleared-For-Construction" Design

(a.) The Contractor must obtain the approval of the Designer of Record (DOR) and the Government's concurrence for any Contractor proposed revision to the professionally stamped and sealed design reviewed and Cleared for Construction by the Government, before proceeding with the revision.

(b.) The Government reserves the right to non-concur with any revision to the design, which may impact furniture, furnishings, equipment selections or operations decisions that were made, based on the reviewed and cleared for construction design.

(c.) Any revision to the design, which deviates from the contract requirements (i.e., the RFP and the accepted proposal), will require a modification, pursuant to the Changes clause, in addition to Government concurrence. The Government reserves the right to disapprove such a revision.

(d.) Unless the Government initiates a change to the contract requirements, or the Government determines that the Government furnished design criteria are incorrect and must be revised, any Contractor initiated proposed change to the contract requirements, which results in additional cost, shall strictly be at the Contractor's expense.

(e.) The Contractor shall track all approved revisions to the reviewed and cleared for construction design and shall incorporate them into the as-built design documentation, in accordance with section 01060 SC entitled PREPARATION OF AS-BUILT DRAWINGS (CONTRACTOR). The Designer of Record shall document its professional concurrence on the As-Builts for any revisions by affixing its stamp and seal on the drawings and specifications.

#### 3.10.1.3 Government Oversight

The extent and character of the work to be done by the Design-Build Contractor shall be subject to the general oversight, supervision, direction, control, and review by the Contracting Officer.

#### 3.10.1.4 Unlimited Drawing Rights

The Government shall have unlimited rights in all drawings, designs, specifications, notes and all other works developed in the performance of this contract, including the right to use same on any other Government design or construction without additional compensation to the Design-Build Contractor. The Design-Build Contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws.

#### 3.10.1.5 Conflicts

Any conflicts, ambiguities, questions or problems encountered by the Design-Build Contractor in following the criteria shall be immediately submitted in writing to the Contracting Officer with the Design-Build Contractor's recommendations. Prior to submission to the Government the Design-Build Contractor shall take appropriate measures to obtain clarification of design criteria requirements, to acquire all pertinent design information, and to incorporate such information in the work being performed.

#### 3.10.1.6 Design Specialists

Whenever a design specialist is required, the Design-Build Contractor shall submit for the approval by Contracting Officer, the name of the designated specialist along with the individual's educational background, experience, and licenses or registrations held, before design work commences. The design specialists shall be registered architects, registered professional engineers, or recognized consultants with a background of at least five (5) years design experience in the appropriate specialty. Services of design specialists may be required for the following specialties:

Fire Protection

Landscape Design

Medical Design	Stage/Theater Design
Acoustical Design	Interior Design
Educational Design	Security
Telecommunications	Audio Visual, PA, TV, etc.
Geotechnical Design	Hardened Structures
Asbestos Abatement	X-Ray Shielding
EMF Shielding	Site grading

### 3.10.2 Conduct of Work

In the performance of contract the Design-Build contractor shall:

#### 3.10.2.1 Performance

Perform the work diligently and aggressively, and promptly advise the Contracting Officer of all significant developments.

#### 3.10.2.2 Telephone Conversations

Prepare a summary, and promptly furnish a copy thereof to the Contracting Officer, of all telephone conversations relating to the design work under this contract.

#### 3.10.2.3 Cooperation with Others

Cooperate fully with other firms, consultants and contractors performing work under the program to which this contract pertains, upon being advised by the Contracting Officer that such firms or individuals have a legitimate interest in the program, have need-to-know status, and proper security clearance where required.

#### 3.10.2.4 Technical Criteria

All designs, drawings, and specifications shall be prepared in accordance with the contract documents and with the applicable publications referenced therein. As soon as possible, the Design-Build Contractor shall obtain copies of all publications applicable to this contract. Availability of publications (where to purchase) is contained in Specification Section 01420 entitled: SOURCES FOR REFERENCE PUBLICATIONS. Any deviations from the technical criteria contained in the contract documents or in the applicable publications, including the use of criteria obtained from the user or other sources, must receive prior approval of the Contracting Officer. Where the technical criteria contained or referred to herein are not met, the Design-Build Contractor will be required to conform his design to the same at his own time and expense.

### 3.10.3 Design Priorities

The design of this project shall consider the remote location and harsh environment of this project and the impact this will have on sources of technical supply, the cost of construction, the low level of maintenance, and the difficulty of obtaining replacement parts. Unless stated otherwise in this contract, the following design priorities shall be followed:

#### 3.10.3.1 CONSTRUCTION LIFE-SPAN LEVELS

Permanent Construction. Buildings and facilities shall be designed and constructed to serve a life expectancy of more than 25 years, to be energy efficient, and to have finishes, materials, and systems that are low maintenance and low life-cycle cost.

Semi permanent Construction. Buildings and facilities shall be designed and constructed to serve a life expectancy of more than 5 years but less than 25 years, to be energy efficient, and to have

finishes, materials, and systems that require a moderate degree of maintenance using the life-cycle cost approach.

Temporary Construction. Buildings and facilities shall be designed and constructed to serve a life expectancy of 2 years or less using low-cost construction, with finishes, materials, and systems that are selected with maintenance factors being a secondary consideration.

Mobilization, Emergency and Contingency Operations Construction. Buildings and facilities shall be designed and constructed to serve a specific mobilization or emergency requirement. Buildings will be austere to minimize construction time and maximize conservation of critical materials. Maintenance factors and longevity will be secondary considerations.

#### 3.10.3.2 Operability

Systems including but not necessarily limited to mechanical, electrical, communications, etc., must be simple to operate and easy to maintain.

#### 3.10.3.3 Standardization

Use of standardized materials, products, equipment, and systems is necessary to minimize the requirements for replacement parts, storage facilities, and service requirements.

#### 3.10.3.4 Overseas Work

Use of construction materials or techniques shall be utilized which are suitable for overseas work in harsh climates and environments.

#### 3.10.4 Topographic Surveys, Easements, and Utilities

Unless otherwise stated in the contract, the Design-Build Contractor will be responsible for detailed topographic mapping, available easements, and utility information for the project.

##### 3.10.4.1 Horizontal and Vertical Control

The mapping shall be based on the base coordinate system. If the base system cannot be found, the surveyor shall use any established monuments. If monuments have been destroyed or do not exist, an assumed horizontal and vertical datum shall be established, using arbitrary coordinates of 10,000n and 10,000e and an elevation of 1,000 meters. The horizontal and vertical control established on site shall be a closed loop with third order accuracy and procedures. Provide three (3) concrete survey monuments at the survey site. All of the control points established at the site shall be plotted at the appropriate coordinate point and shall be identified by name or number, and adjusted elevations. The location of the project site, as determined by the surveyor shall be submitted in writing to the Contracting Officer. The site location shall be identified by temporary markers, approved by the Contracting Officer before proceeding with the surveying work.

##### 3.10.4.2 Topography Requirements

A sufficient quantity of horizontal and vertical control shall be established to provide a detailed topographic survey at 1:500 scale with one quarter meter contour intervals minimum. Intermediate elevations shall be provided as necessary to show breaks in grade and changes in terrain.

The contours shall accurately express the relief detail and topographic shapes. In addition, 90 percent of the elevations or profiles interpolated from the contours shall be correct to within one-half of the contour interval and spot elevations shall be correct within plus or minus 20 millimeters.

Spot elevations affecting design of facilities shall be provided. Specifically, break points or control points in grades of terrain such as tops of hills, bottoms of ditches and gullies, high bank elevations, etc.

All surface and sub-surface structures features within the area to be surveyed shall be shown and identified on the topographic maps. In addition, these features shall be located by sufficient distance ties and labeled on the topographic sheets to permit accurate scaling and identification.

The location and sizes of potable, sanitary, electrical and mechanical utilities within the survey site shall be shown on the survey map. Sanitary manholes and appurtenances shall show top elevations and invert elevations.

### 3.10.5 Geotechnical Investigation

Unless otherwise stated in the contract, the Design-Build Contractor will be responsible for Geotechnical investigation, including subsurface explorations, sampling, field and laboratory testing, and water studies where applicable.

### 3.10.6 Cathodic Protection and Earth Resistance

Unless otherwise stated in the contract, the Design-Build Contractor will be responsible for determining whether cathodic protection on buried structures and underground utility systems are needed for special electrical grounding and counterpoise systems, and for gathering the field data necessary for design.

### 3.10.7 Water Supply and Quality Data

Unless otherwise stated in the contract, the Design-Build Contractor will be responsible for obtaining all water supply and water quality data. This data will include information on the locations and depths of all viable water supply sources at the site(s) involved and a water quantity and water quality analysis for each source.

### 3.10.8 Occupational Safety and Health Act

The facilities, systems, and equipment designed under this contract shall comply with the Occupational Safety and Health Act (OSHA), Code of Federal Regulations, Title 29, Chapter XVII, Parts 1910 and 1926. Any problems in incorporating these standards due to conflicts with other technical criteria shall be submitted to the Contracting Officer for resolution.

### 3.10.9 Asbestos Containing Materials

Asbestos containing material (ACM) will not be used in the design of new structures or systems. In the event no other material is available which will perform the required function or where the use of other material would be cost prohibitive, a waiver for the use of asbestos containing materials must be obtained from CETAC.

#### 3.10.9.1 Existing Construction

Asbestos containing materials (ACM) presently included in existing construction to be rehabilitated or otherwise modified as a result of this project, shall be removed and a non-asbestos containing material substituted in lieu thereof.

#### 3.10.9.2 Suspected Asbestos Containing Materials

All such structures and systems shall be inspected to determine the presence or probable presence of ACM. When ACM is suspected, a documented survey will be performed. The survey will be

developed into an abatement design and will be made a part of the design documents. In the event no other material is available which will perform the required function or the use of a substitute material would be cost prohibitive due to initial cost and tear-out of existing construction, a waiver for the retention of the asbestos containing material must be obtained from the Contracting Officer.

### 3.11 VALUE METHODOLOGY/VALUE ENGINEERING

The Design-Build Contractor during the course of his design shall be alert for and shall identify those high-cost low-value items or areas which he considers may be accomplished in different ways that will increase the value of the project at the same or less cost. Potential value engineering study items shall be reported to the Value Engineer through the Contracting Officer.

#### 3.11.1 Performance Oriented Value Engineering Change Proposal (VECP)

In reference to Contract Clause 52.248-3, "Value Engineering - Construction", the Government may refuse to entertain a "Value Engineering Change Proposal" (VECP) for those "performance oriented" aspects of the Contract Documents which were addressed in the Design-Build Contractor's accepted contract proposal and which were evaluated in competition with other Proposers for award of this contract. For purposes of this clause, the term "performance oriented" refers to those aspects of the design criteria or other contract requirements which allow the Proposer or the Design-Build Contractor certain latitude, choice of and flexibility to propose in its accepted contract offer a choice of design, technical approach, design solution, construction approach or other approach to fulfill the contract requirements. Such requirements generally tend to be expressed in terms of functions to be performed, performance required or essential physical characteristics, without dictating a specific process or specific design solution for achieving the desired result.

#### 3.11.2 Prescriptive Oriented Value Engineering Change Proposal (VECP)

The Government may consider a VECP for those "prescriptive" aspects of the Solicitation documents, not addressed in the Design-Build Contractor's accepted contract proposal or addressed but evaluated only for minimum conformance with the Solicitation requirements. For purposes of this clause, the term "prescriptive" refers to those aspects of the design criteria or other Solicitation requirements wherein the Government expressed the design solution or other requirements in terms of specific materials, approaches, systems and/or processes to be used. Prescriptive aspects typically allow the Proposers little or no freedom in the choice of design approach, materials, fabrication techniques, methods of installation or other approach to fulfill the contract requirements.

### 3.12 SUBMITTAL OF CONTRACTOR FURNISHED DESIGN DOCUMENTS

The requirements of this paragraph pertain to the submittal of design documents, specifications, design calculations, surveys, testing reports and other documents prepared by the Design-Build Contractor to meet the design requirements of this project.

#### 3.12.1 Geo-technical

##### 3.12.1.1 Design Analysis

The Design-Build Contractor shall submit in the design analysis catalog cuts, manufacturer's data for the following:

##### 3.12.1.2 Specifications

Specifications for all civil utilities shall include:

##### 3.12.1.3 Design Drawings

1 ea. Full Size, 2 ea. Half-Size Design drawings shall be submitted for the following:

Afghanistan Engineer District (AED)

3.12.1.4 Manufacturer's recommendations, instructions, and certifications

Shall be submitted for the following:

Afghanistan Engineer District (AED)

3.12.1.5 Samples

Samples shall be submitted for the following:

Afghanistan Engineer District (AED)

3.12.1.6 Schedules

Schedules shall be submitted for the following:

Afghanistan Engineer District (AED)

3.12.1.7 Reports

Reports shall be submitted for the following:

Afghanistan Engineer District (AED)

3.12.1.8 Records

Records shall be submitted for the following:

Afghanistan Engineer District (AED)

Engineering Studies. Occasionally, in addition to the items previously mentioned, engineering studies that relate to specific problems or surveys may be required. The necessary instructions regarding the preparation of such reports must be added by the Specification Writer as appropriate.

3.12.2 Civil, Site Planning and Layout

3.12.3 Water, Wastewater, and Solid Waste Systems

3.12.4 Architectural/Interior Design

3.12.5 Structural

3.12.6 Force Protection Design Procedures for the Protection of United States Forces

3.12.7 Fire Protection and Life Safety

3.12.8 Heating, Ventilating, and Air Conditioning

3.12.9 Plumbing

3.12.10 Special Mechanical Systems and Equipment

3.12.11 Electrical

3.12.12 Power Generation

3.12.13 Power Transmission and Distribution

3.12.14 Communications

3.12.15 Corrosion Prevention and Control

3.12.16 Renovation Design

3.12.17 Accident Prevention and Safety

### 3.13 SUBMITTAL OF CONTRACTOR FURNISHED DESIGN DRAWINGS

3.13.1 Geo-technical

3.13.2 Civil, Site Planning and Layout

3.13.3 Water, Wastewater, and Solid Waste Systems

3.13.4 Architectural/Interior Design

3.13.5 Structural

3.13.6 Force Protection Design Procedures for the Protection of United States Forces

3.13.7 Fire Protection and Life Safety

3.13.8 Heating, Ventilating, and Air Conditioning

3.13.9 Plumbing

3.13.10 Special Mechanical Systems and Equipment

3.13.11 Electrical

3.13.12 Power Generation

3.13.13 Power Transmission and Distribution

3.13.14 Communications

3.13.15 Corrosion Prevention and Control

3.13.16 Renovation Design

3.13.17 Accident Prevention and Safety

### 3.14 GOVERNMENT APPROVED CONSTRUCTION SUBMITTALS (Required During Construction)

3.14.1 General

Since this contract requires that the drawings and specifications specify specific proprietary materials, equipment, systems, and patented processes by trade name, make, or catalog number, it is

anticipated that construction shop drawings will primarily be limited to testing, construction plans (e.g., Contractor Quality Control, Accident Prevention, Resident Management System, Area Use etc), schedules (Project Schedule/Network Analysis), certificates of compliance, reports, records/statements and variations.

#### 3.14.1.1 Variations

After design submittals have been reviewed and cleared for construction by the Contracting Officer, no submittal for the purpose of substituting materials, equipment, systems, and patented processes will be considered by the Government unless submitted in accordance with the paragraph entitled VARIATIONS.

#### 3.14.1.2 Additional Shop Drawings and Submittals

In accordance with the paragraph entitled DESIGN DISCREPANCIES, the Government may request the Design-Build Contractor to provide additional shop drawing and submittal type data subsequent to completion of the design.

#### 3.14.2 Incomplete Design

The Design-Build Contractor shall not use construction submittals as a means to supplant and/or supplement an incomplete design effort.

#### 3.14.3 Government Approval of Construction Submittals

The approval of construction submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the general method of design construction, materials, detailing and other information are satisfactory. Approval will not relieve the Design-Build Contractor of the responsibility for any error which may exist, as it is the sole responsibility of the Design-Build Contractor to certify that each submittal has been reviewed in detail and is in strict conformance with all the contract documents and design criteria referenced therein.

Virtually all design related construction submittals can and must be incorporated directly into the design specifications and drawings prepared by the Design-Build Contractor. Since the Design-Build Contractor has sole responsibility for the design, procurement, and construction, impediments do not exist which would impair his ability to specifically identify what is being furnished to the Government prior to the start of construction. Generic/non-proprietary specifications are indicative of an incomplete design effort and as such must be rejected as unacceptable

#### 3.14.4 Submittals

Submittals (other than shop drawings) shall be limited to items such as Plans (e.g., Quality Control Plan, Accident Prevention Plan, Area Use Plan etc.), Certificates of Compliance, Installation Instructions, Manufacturer's Catalog Data, Descriptive Literature/Illustrations, Factory and Field Test Reports, Performance and Operational Test Data Reports, Records, Operation and Maintenance Manuals, and required variations.

#### 3.14.5 Government Review

Upon completion of review of construction submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. two (2) copies of the submittal will be retained by the Contracting Officer and one (1) copy of the submittal will be returned to the Design-Build Contractor.

#### 3.15 FOR INFORMATION ONLY SUBMITTALS

These submittals shall be checked, stamped, signed and dated by the Design-Build Contractor's Quality Control Engineer, certifying that such submittal complies with the contract requirements. All Contractor submittals shall be subject to review by the Government at any time during the course of the contract. Any Contractor submittal found to contain errors or omissions shall be resubmitted as one requiring "approval". No adjustment for time or money will be allowed for corrections required as a result of noncompliance with plans or specifications. Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. These submittals will be used for information purposes. The Government reserves the right to require the Design-Build Contractor to resubmit any item found not to comply with the contract. This does not relieve the Design-Build Contractor from the obligation to furnish material conforming to the plans and specifications and will not prevent the Contracting Officer from requiring removal and replacement if nonconforming material is incorporated in the work.

### 3.16 ATTACHMENTS

The following attachments form an integral part of this specification:

ENG FORM 4025 - Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certificate of Compliance (2 pages)

TAC FORM 122-E - Contractor Furnished Design Documents Submittal Register

ENG FORM 4288 - Submittal Register

Select one of the following:  
AED projects:

Figure 1 – From AEC CADD Standards all sheet/number description; AED title block

Figure 2 - From AEC CADD Standards all A-E logo/created by/submitted by; AED title block

Figure 3 - From AEC CADD Standards all revision block; AED title block

Figure 4 - From AEC CADD Standards all Finished Format Size

-- End of Section -

QUESTIONS & ANSWERS (Q&A)  
RFP, Warehouses (National Military Academy of Afghanistan), D/B Bathrooms (Darulaman) and  
D/B Parking (Camp Julian), Kabul, Afghanistan

**(Questions & Answers provided for informational purposes only)**

If any Government responses indicate a change to the technical proposal, it is not official until  
and amendment is issued)

13 Nov 2007

Question 1. In accordance with Clause 5.1 Performance Period, the completion time from NTP for Temporary Bath and Parking at Darulaman is 65days. It is of my opinion that the completion period is not fair enough to complete the works within the specified duration for the following reasons:

- (1) Site Survey/Master Planning requires 10 days from NTP (refer to Clause 5.1);
- (2) Contractor's submittal for approval of a complete design schedule within 14 days from NTP (refer to Clause 3.7.4);
- (3) Government's review and comment on the 35% design submittal within 14 days after submittal;
- (4) Government's review and comment on the 100% design submittal within 14 days after submittal.

It takes 42days from NTP to get approval for drawings from the Government, thus only 23days are allowed for the practical construction works.

Response: In response to the questions we have revised Section 01335. For the Bathrooms and Parking only the construction Submittal will be required.